MRC Unit for Lifelong Health and Ageing

UCL

Mental health measure harmonisation workshop: Introduction to the cohorts and measures

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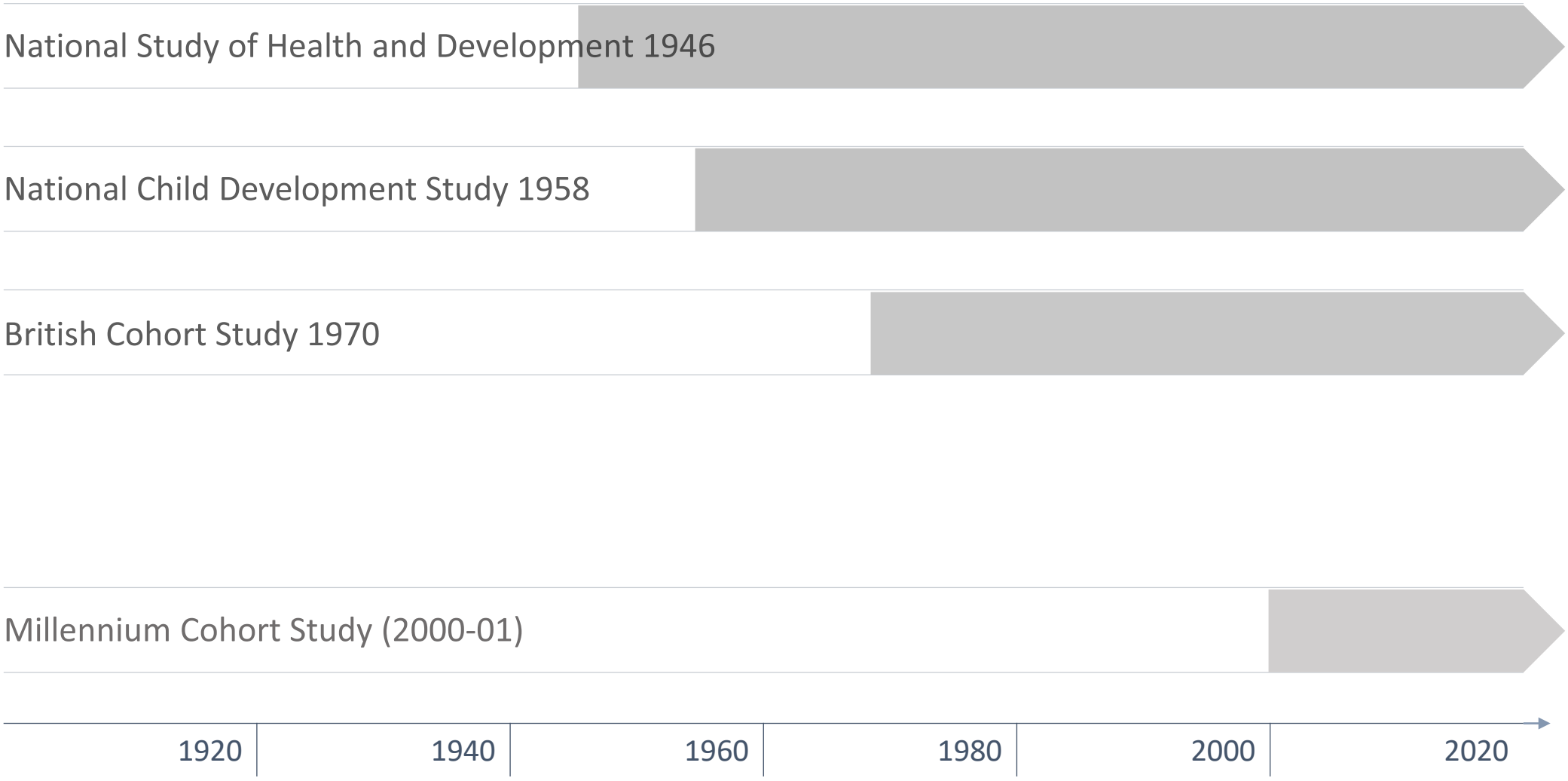
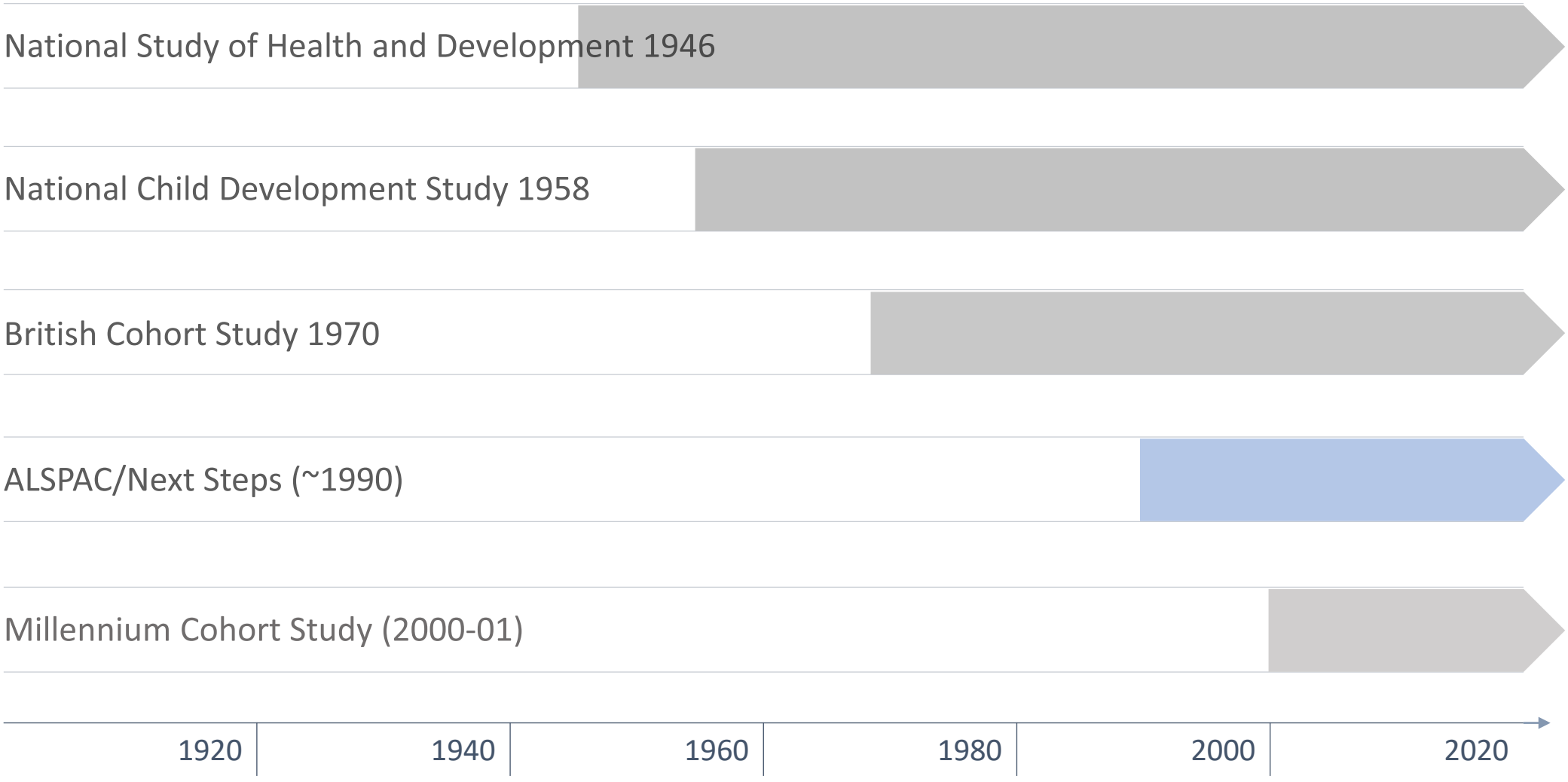
CENTRE FOR LONGITUDINAL STUDIES

The British birth cohorts

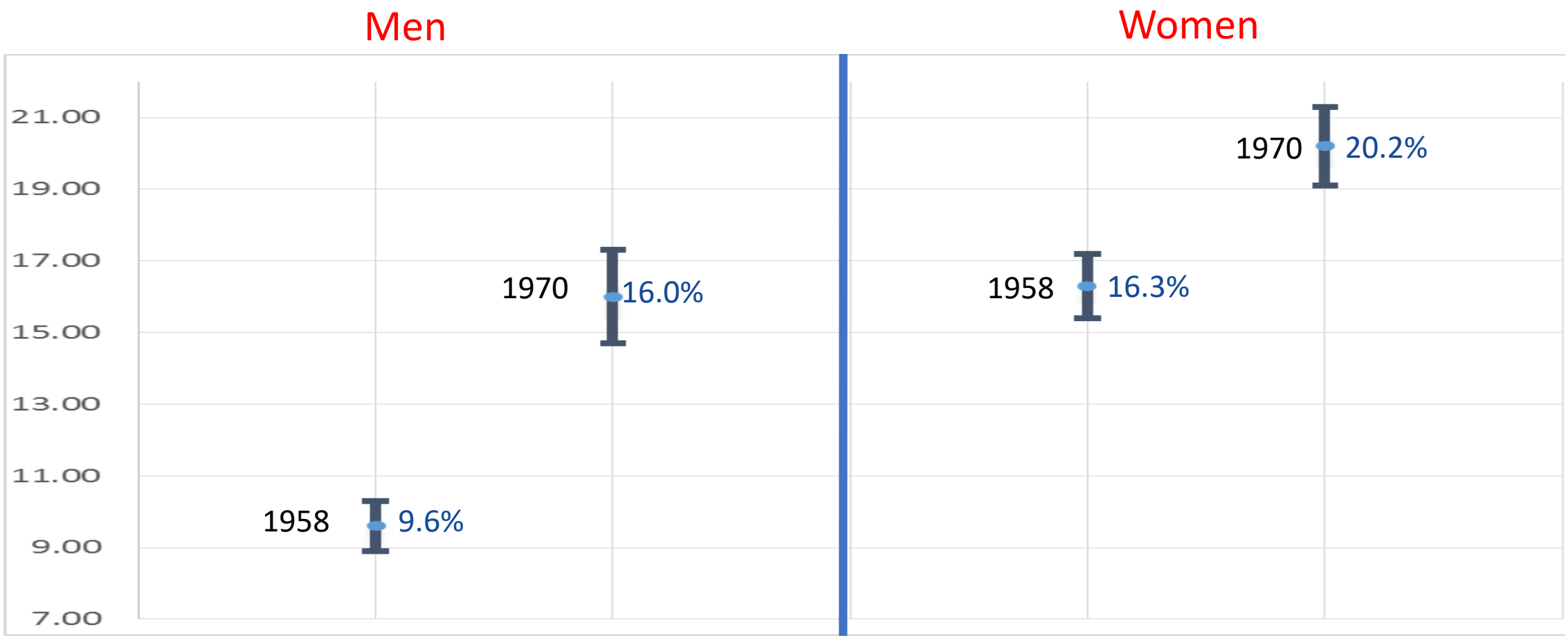



National Study of Health and Development 1946
National Child Development Study 1958
British Cohort Study 1970
ALSPAC/Next Steps (~1990)
Millennium Cohort Study (2000-01)
1920
1940
1960
1980
2000
2020

Measures in adulthood

	20s	30s	40s	50s	60s
1946 NSHD	------	PSE	PSF	GHQ-28	GHQ-28
1958 NCDS	Malaise	Malaise	Malaise	Malaise	
1970 BCS	Malaise	Malaise	Malaise		

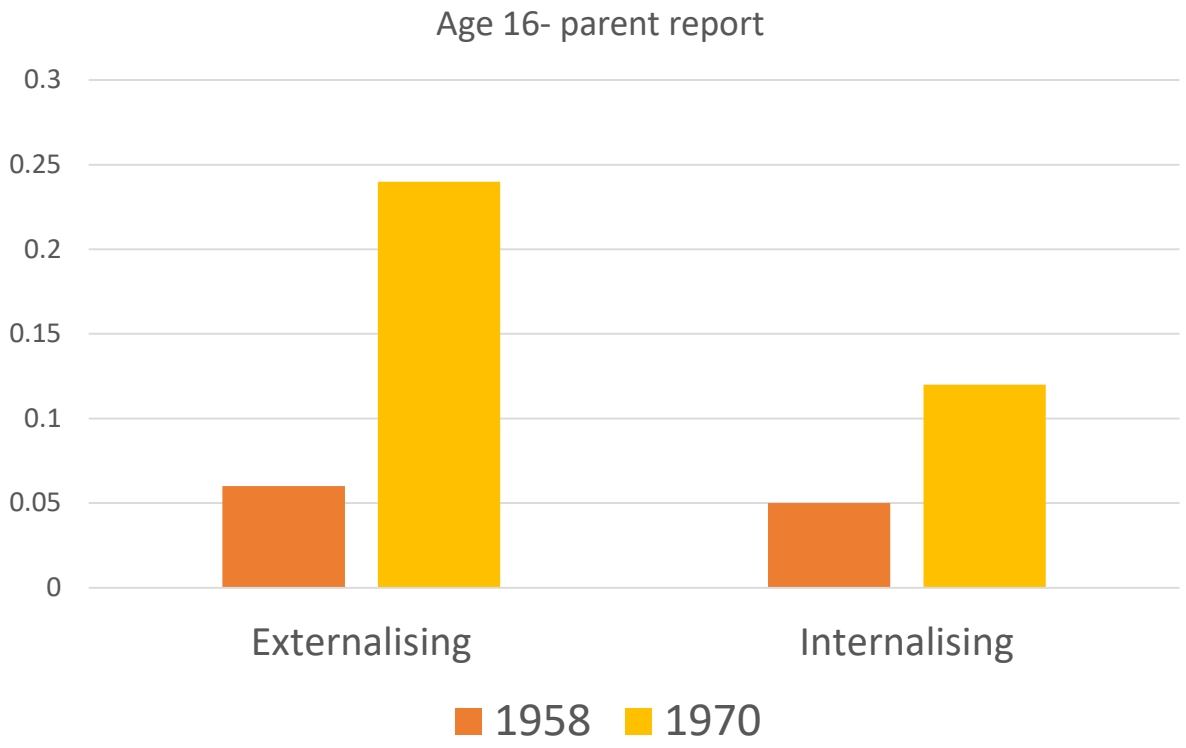
Psychological distress: 1958 and 1970 cohorts at 42

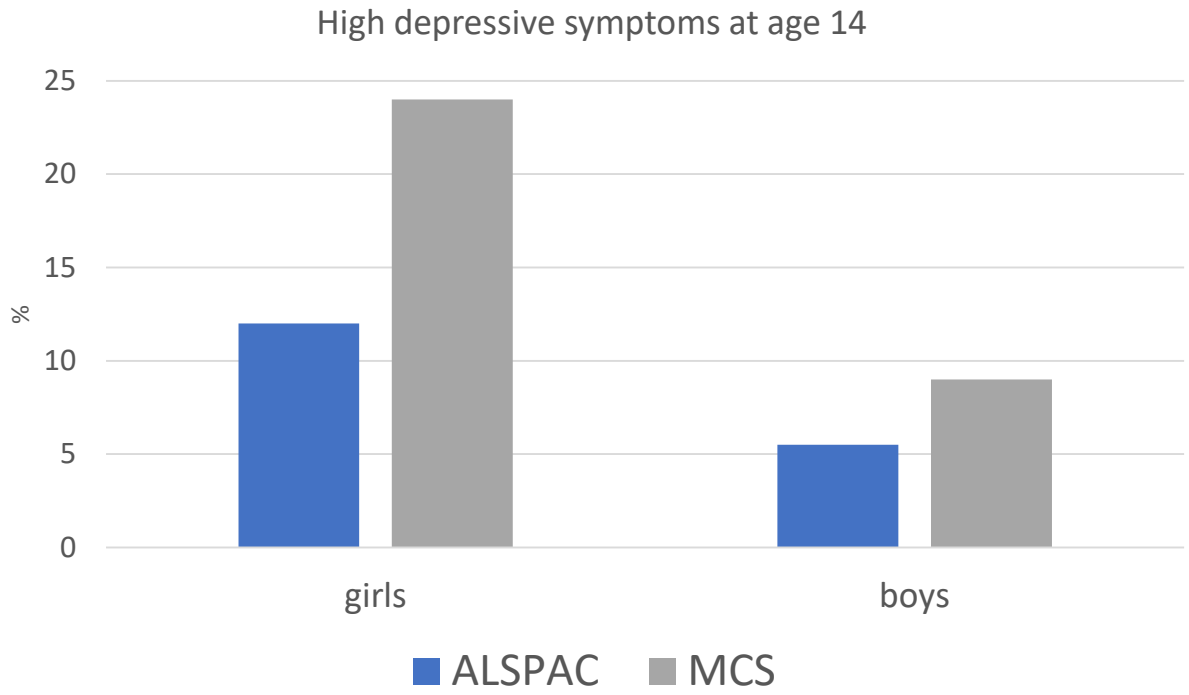


Ploubidis et al, Psych Med 2016

Measures in childhood

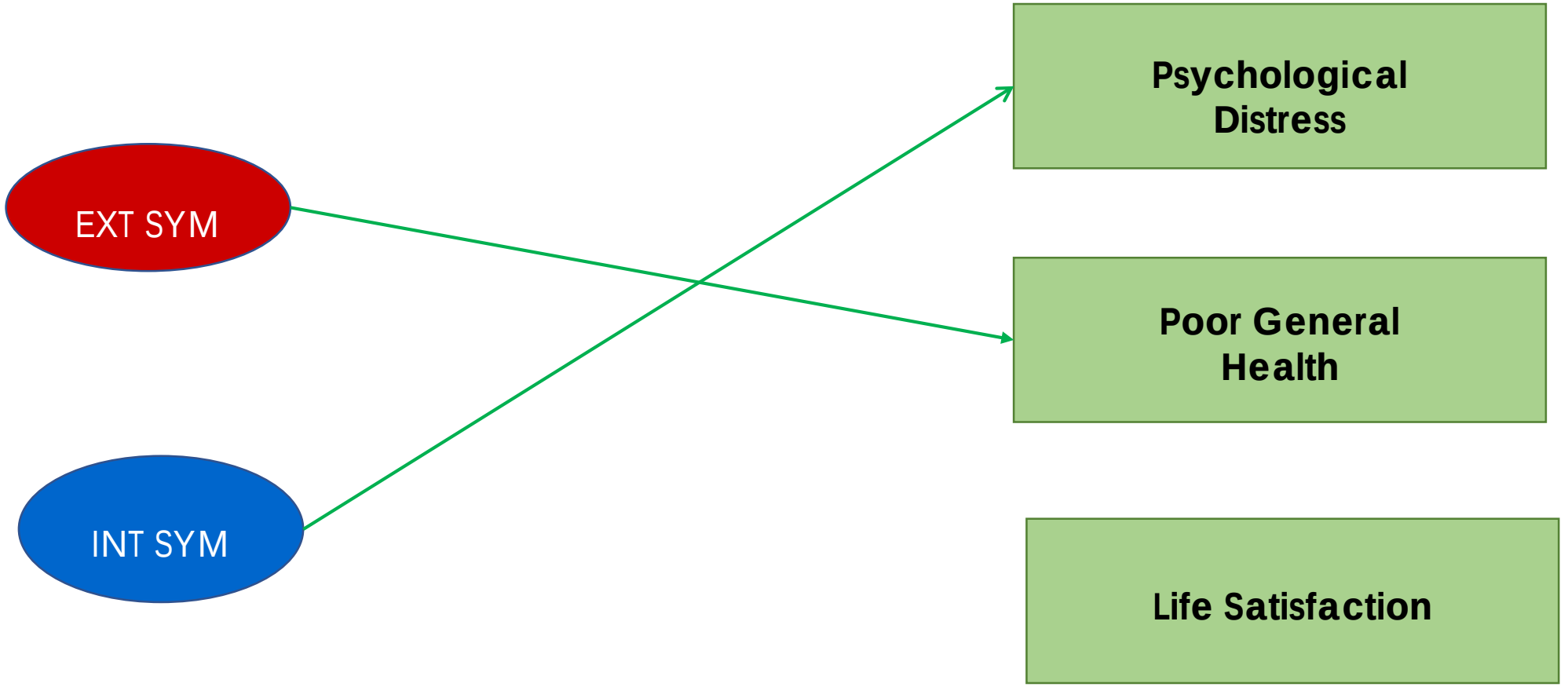
	Childhood	Adolescence
1946 NSHD	--------	Teacher report
1958 NCDS	Parent report (Rutter, BSAG)	Parent report (Rutter)
1970 BCS	Parent report (Rutter, Connor) Teacher report (Rutter, Connor)	Parent report (Rutter) Self report (Malaise, GHQ)
1989 Next Steps	--------	Self report (GHQ)
1991 ALSPAC	Parent report (SDQ)	Parent report (SDQ) Self report (SMFQ)
2001 MCS	Parent report (SDQ) Teacher report (SDQ)	Parent report (SDQ) Self report (SMFQ)





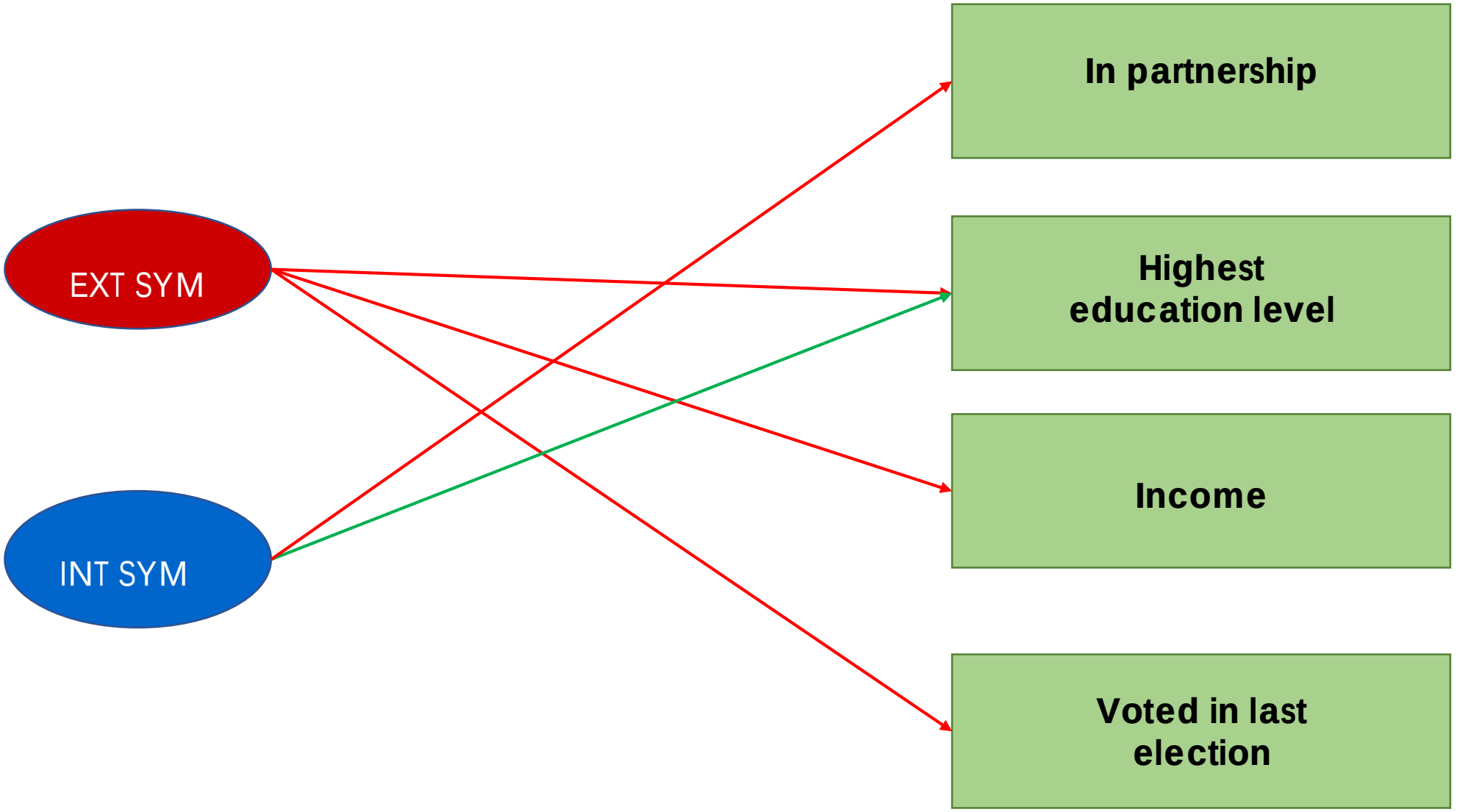
Patalay & Gage, 2019 IJE; Thompson et al, in prep

Age 16 MH -> health and wellbeing at 42



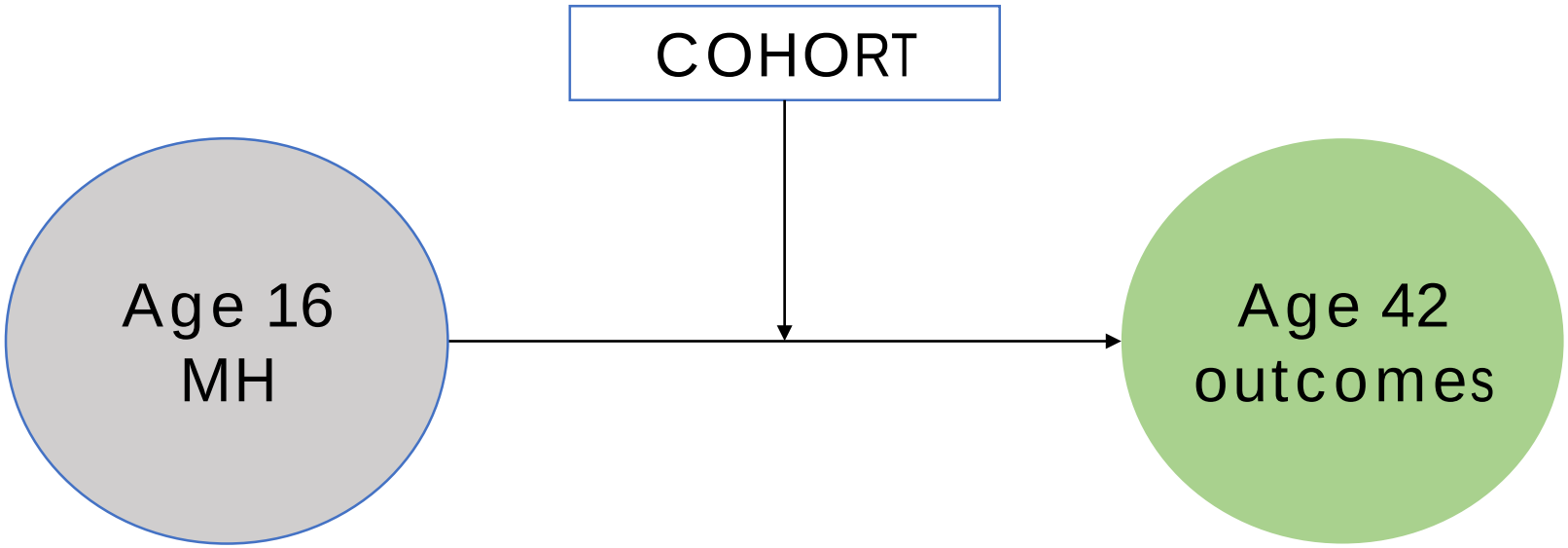
Thompson et al, in prep

Age 16 MH -> Economic and social outcomes at 42



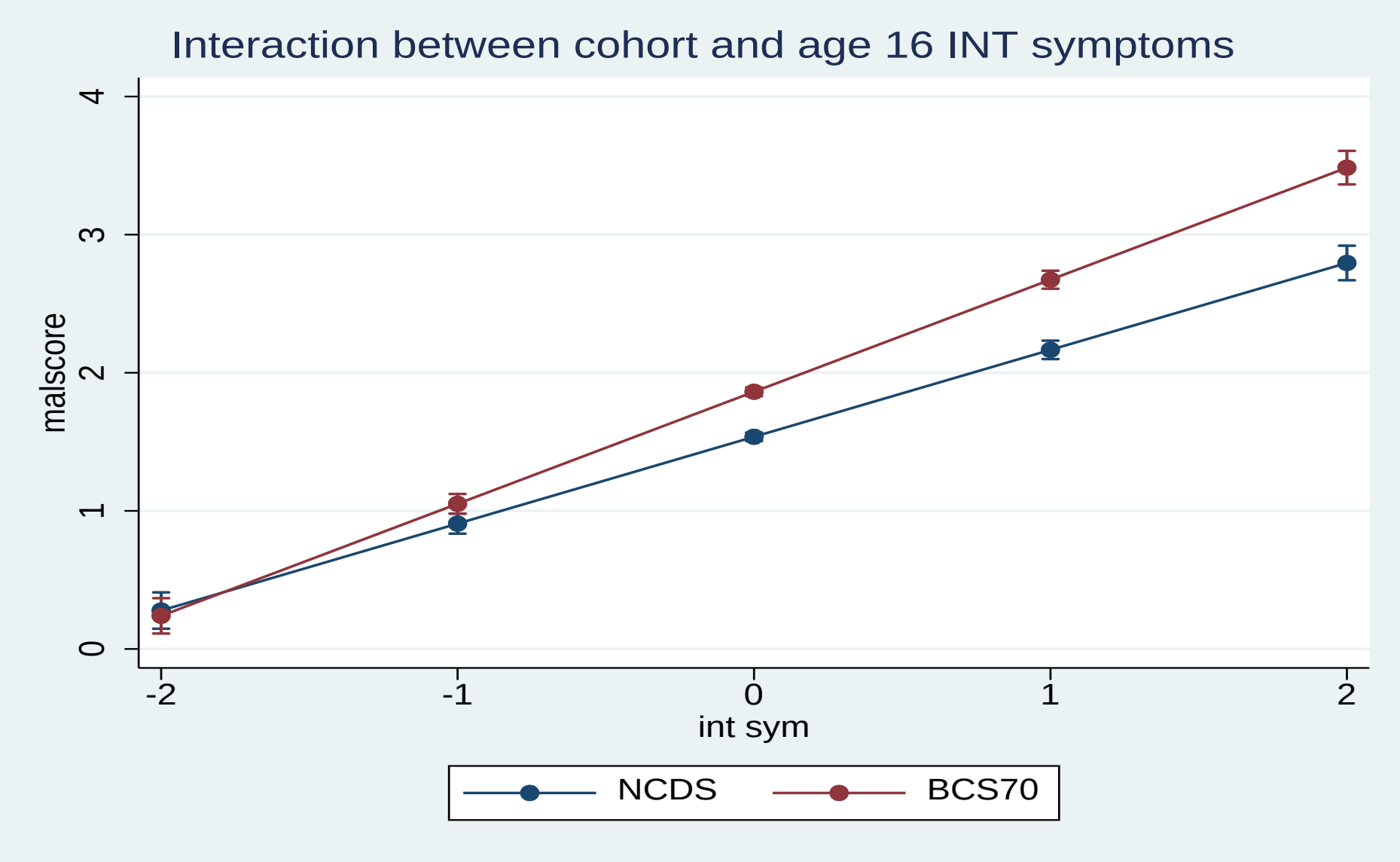
Thompson et al, in prep

Any differences by cohort?



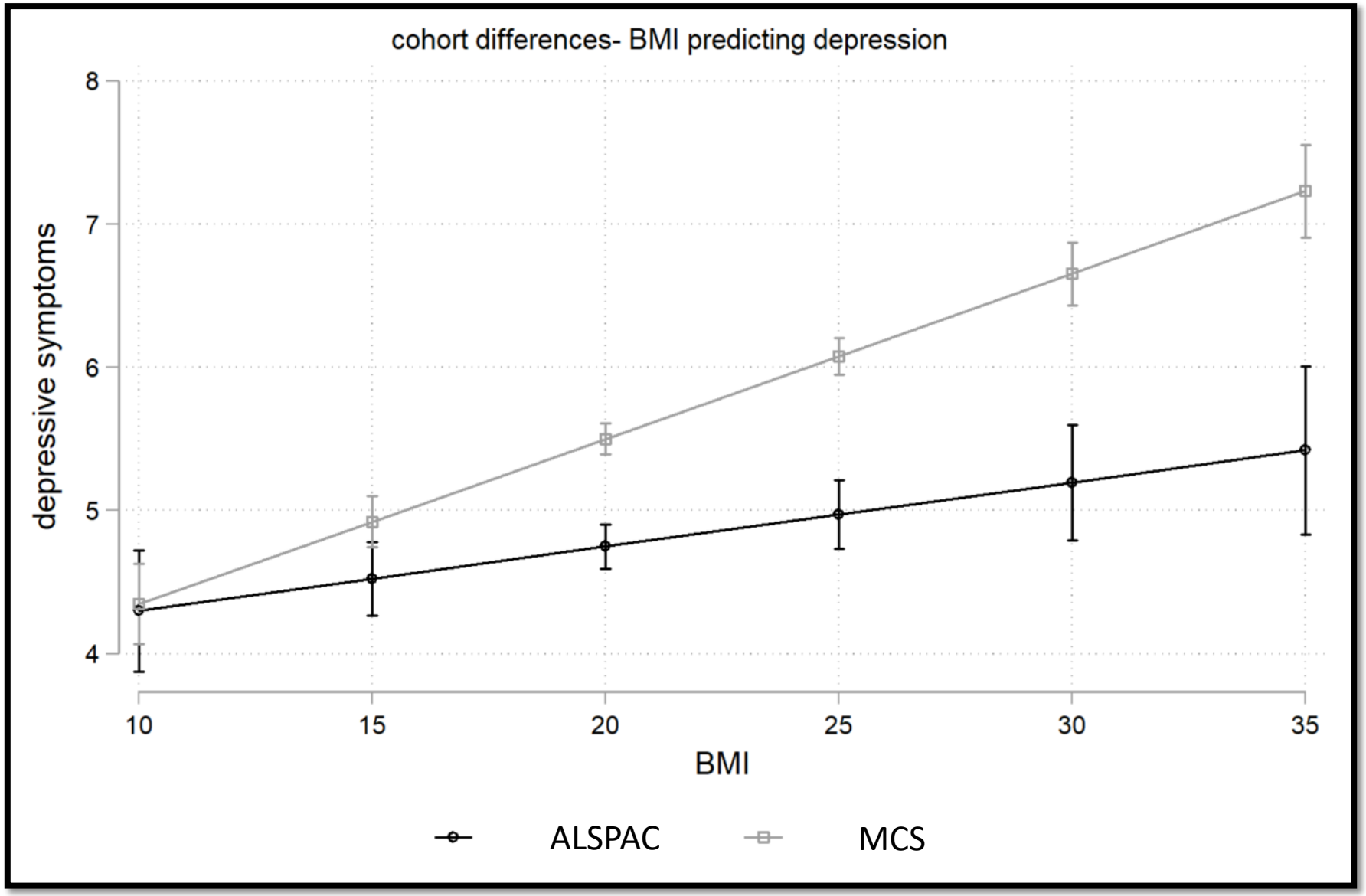
Thompson et al, in prep

Age 16 MH → age 42 mental health



Thompson et al, in prep

Cohort differences: BMI → depressive symptoms



Gage & Patalay, in prep

Measures in childhood

	Childhood	Adolescence
1946 NSHD	--------	Teacher report
1958 NCDS	Parent report (Rutter)	Parent report (Rutter)
1970 BCS	Parent report (Rutter)	Parent report (Rutter) Self report (Malaise, GHQ)
1989 Next Steps	--------	Self report (GHQ-12)
1991 ALSPAC	Parent report (SDQ)	Parent report (SDQ) Self report (SMFQ)
2001 MCS	Parent report (SDQ) Teacher report (SDQ)	Parent report (SDQ) Self-report (SMFQ)

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Cross-cohort change in adolescent outcomes for children with mental health problems

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Background: Child mental health problems are common. Previous studies have examined secular changes in their prevalence but have not assessed whether later outcomes have changed. We therefore aimed to test whether outcomes of child mental health problems have changed over a 40-year period. **Methods:** Three cohorts were utilized: The National Child Development Study (NCDS: *N* – 14,544, aged 7 in 1965), the Avon Longitudinal Study of Parents and Children (ALSPAC: *N* – 8,188, aged 7 in 1998), and the Millennium Cohort Study (MCS: *N* – 13,192, aged 7 in 2008). Mental health problems at age 7 were identified using the parent-reported Rutter-A scale (NCDS) and Strengths and Difficulties Questionnaire (ALSPAC and MCS). Associated outcomes were compared across cohorts: age 11 social functioning, age 16 exam attainment and age 16 mental health. **Results:** Child mental health problems were common in each cohort (boys: 7.0% 9.7%; girls: 5.4% 8.4%). Child mental health problems became more strongly associated with social functioning problems (boys: NCDS OR – 1.95 (1.50, 2.53), MCS OR – 3.77 (2.89, 4.92); interaction $p < .001$; girls: NCDS OR – 1.69 (1.22, 2.33), MCS OR – 3.99 (3.04, 5.25), interaction $p < .001$), lower academic attainment for boys (NCDS OR – 0.49 (0.31, 0.78), ALSPAC OR – 0.30 (0.22, 0.41), interaction $p – .009$), and age 16 mental health problems (boys: NCDS d' – 0.55 (0.38, 0.72), ALSPAC d' – 0.95 (0.73, 1.16); interaction $p – .004$; girls: NCDS d' – 0.50 (0.34, 0.65), ALSPAC d' – 0.99 (0.78, 1.20); interaction $p < .001$). **Conclusions:** Child mental health problems have become more strongly associated with negative social, educational and mental health outcomes in recent generations. **Keywords:** Child mental health; secular change; National Child Development Study; Avon Longitudinal Study of Parents and Children; Millennium Cohort Study.

Calibrated the MH measures at age 7 (Rutter and SDQ) in NCDS, ALSPAC and MCS using data from another sample…

Summary

- Mental health measures have been included in the cohorts at all sweeps since the late 1950s
  - Measures, reference time, reporter not always the same
  - To make robust comparisons within and between cohorts – measures need to be harmonised

- The potential for cross-cohort research is enhanced by understanding how the measures behave comparatively
  - Harmonisation
  - Calibration

Thank you!

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